

Claims

1. Seat assembly for a motor vehicle seat with
 - a seat element, that constitutes a component of the seat structure of a motor vehicle seat,
 - a tubular drive element, pivotably connected to the seat element that constitutes a component of a displacement arrangement for an adjustable part of the motor vehicle seat, and
 - a weight sensor for the detection of seat occupancy and/or of the weight of a seat user,

characterized in

that the tubular drive element (2) is mounted on the seat element (1) via the weight sensor (3).

2. Seat assembly according to claim 1, **characterized in** that the tubular drive element (2) is pivotably mounted on a mounting section (35) of the weight sensor (3).
3. Seat assembly according to claim 2, **characterized in** that the mounting section (35) extends axially into the inside of the tubular drive element (2) and/or of an element (4, 4', 4'', 4''', 4a, 4b) nonpivotably connected thereto.
4. Seat assembly according to claim 2 or 3, **characterized in** that the mounting section (35) is provided with an adapter (38), in particular, in the form of an adapter bushing.

5. Seat assembly according to one of the preceding claims, **characterized in** that a mounting element (4, 4', 4'', 4''', 4a, 4b) is arranged on the tubular drive element (2), via which mounting element the tubular drive element (2) is pivotably mounted on the weight sensor (3).
6. Seat assembly according to claim 5, **characterized in** that the mounting element (4, 4') is attached by means of a screw connection on the inside or outside wall (21, 22) of the tubular drive element (2).
7. Seat assembly according to claim 5, **characterized in** that the mounting element (4'', 4a, 4b) is connected to the tubular drive element (2) by welding or gluing.
8. Seat assembly according to one of claims 5 through 7, **characterized in** that the mounting element (4a, 4b) is designed with multiple parts, with one part (4a) serving for the pivotable mounting of tubular drive element (2) on the weight sensor (3) and the other part (4b) serving for the nonpivotable connection of the mounting element (4a, 4b) to the tubular drive element (2).
9. Seat assembly according to claim 8, **characterized in** that the two parts (4a, 4b) of the mounting element are formed by threaded bushings that can be screwed together, one of which has an external thread and the other an internal thread.
10. Seat assembly according to one of claims 5 through 9, **characterized in** that the mounting element (4, 4', 4'', 4''', 4a, 4b) can be preassembled on the weight sensor (3) using axial locking means (37) before it is nonpivotably connected to the tubular drive element (2).
11. Seat assembly according to claim 2 or one of claims 3 through 10, to the extent referenced to claim 2, **characterized in** that the mounting section (35) serves for the radial mounting of the tubular drive element (2).

12. Seat assembly according to claim 11, **characterized in** that a locking element (36, 37, 38) for the axial retention of the tubular drive element (2) is arranged on the mounting section (35).
13. Seat assembly according to one of the preceding claims, **characterized in** that the tubular drive element (2) is axially secured in one direction by the main body (30) of the weight sensor (3).
14. Seat assembly according to claim 2 or one of claims 3 through 13, to the extent referenced to claim 2, **characterized in** that the mounting section (35) serves for the radial and axial mounting of the tubular drive element (2).
15. Seat assembly according to claim 14, **characterized in** that toothed zones (35a, 46) mesh with each other for the mounting of the tubular drive element (2) on the mounting section (35).
16. Seat assembly according to one of the preceding claims, **characterized in** that the weight sensor (3) is designed as an electrically operated sensor.
17. Seat assembly according to one of the preceding claims, **characterized in** that the weight sensor (3) is designed for the detection of bending stresses.
18. Seat assembly according to one of the preceding claims, **characterized in** that the weight sensor (3) is arranged nonpivotably on the seat element (1).
19. Seat assembly according to claim 18, **characterized in** that at least one lock nut (51, 52, 53) serves for the nonpivotable arrangement of the weight sensor (3) on seat element (1).
20. Seat assembly according to one of the preceding claims, **characterized in** that the weight sensor (3) is designed in two parts.

21. Seat assembly according to claim 20, **characterized in** that the two sensor parts (31, 32) are nonpivotably connected to each other.
22. Seat assembly according to claim 2 and claim 20 or 21, **characterized in** that a sensor part (32) has a mounting section (35) for the pivotable mounting of the drive tube (2).
23. Seat assembly according to claim 18 and one of claims 20 through 22, **characterized in** that a sensor part (31) is nonpivotably fixed to the seat element (1).
24. Seat assembly according to one of the preceding claims, **characterized in** that the tubular drive element (2) and the weight sensor (3) constitute a preassembled assembly that can be attached to the seat element (1).
25. Seat Assembly according to one of the preceding claims, **characterized in** that the tubular drive element (2) constitutes a transverse tube, that runs, in particular, from one longitudinal side of a motor vehicle seat to the other, or is a component of a transverse connection running from one longitudinal side of a motor vehicle seat to the other.
26. Seat assembly according to one of the preceding claims, **characterized in** that the seat element (1) is made up of a mounting angle that is attached to a part (O) of the seat structure.